

ABSTRACT OF THE DISCLOSURE

An optical transmission line and an optical transmission system capable of preventing signal distortion over a wide wavelength range are provided.

- 5 The optical transmission line comprises a first negative dispersion fiber having an absolute value of a dispersion slope of not larger than 0.03 ps/nm²/km and overall dispersion of not larger than -5 ps/nm at one wavelength in the range of 1450 nm to 1600 nm, and a positive dispersion fiber, which are disposed in this order in a direction of transmission of signal light. The optical
- 10 transmission system comprises a transmitter and an optical transmission line, the line comprising a first optical fiber disposed on the most upstream side and a second optical fiber spliced to the first optical fiber. The first optical fiber has negative chromatic dispersion and an absolute value of a dispersion slope of not larger than 0.03 ps/nm²/km at any one wavelength of the signal light.
- 15 An absolute value of the sum of overall dispersion of the first optical fiber and overall dispersion of the second optical fiber is smaller than an absolute value of the overall dispersion of the first optical fiber.